

What is claimed is:

1. A watermark-based copy management method for digital media copy protection, the method comprising the steps of:

receiving an original media data set that includes an original watermark, said original watermark including a first copy control information which is set to one of "copy freely", "copy for display only", "copy one generation", "copy never", and "no more copies";

analyzing said first copy control information to determine whether said first copy control information is set to "copy one generation";

playing said original media data set only if said first copy control information is set to "copy one generation";

embedding a player watermark into said played media data set, said player watermark including a second copy control information set to "no more copies"; and

transferring said player watermark-embedded media data set to a recording device.

2. The method of claim 1, wherein said original watermark further includes watermark type and owner identification information.

3. The method of claim 1, wherein said player watermark further includes player identification information.

4. A watermark-based copy management method for digital media copy protection, the method comprising the steps of:

receiving an original media data set that includes an original watermark, said original watermark including a first copy control information which is set to one of "copy freely", "copy for display only", "copy one generation", "copy never", and "no more copies";

analyzing said first copy control information to determine whether said first copy control information is set to "copy one generation";

playing said original media data set only if said first copy control information is set to "copy one generation";

embedding a player watermark into said played media data set, said player watermark including a second copy control information set to "copy for display only"; and

transferring said player watermark-embedded media data set to a displaying device.

5. The method of claim 4, wherein said original watermark further includes watermark type and owner identification information.

6. The method of claim 4, wherein said player watermark further includes player identification information.

7. A watermark-based copy management system for digital media copy protection, the system comprising:

a copy control information analyzer analyzing a first copy control information included in an original watermark embedded into an original media data set, said first copy control information being set to one of "copy freely", "copy for display only", "copy one generation", "copy never", and "no more copies";

a playing element playing said original media data set only if said first copy control information is set to "copy one generation";

a watermark generator embedding a player watermark into said played data set, said player watermark including a second copy control information set to "no more copies"; and

a recording device recoding said player watermark-embedded media data set.

8. The system of claim 7, wherein said original watermark further includes watermark type and owner identification information.

9. The system of claim 7, wherein said player watermark further includes player identification information.

10. A watermark-based copy management system for digital media copy protection, the system comprising:

a copy control information analyzer analyzing a first copy control information included in an original watermark embedded into an original media data set, said first copy control information being set to any one of "copy freely", "copy for display only", "copy one generation", "copy never", and "no more copies";

a playing element playing said original media data set only if said first copy control information is set to "copy one generation";

a watermark generator embedding a player watermark into said played data set, said player watermark including a second copy control information set to "copy for display only"; and

a displaying device displaying said player watermark-embedded media data set.

11. The system of claim 10, wherein said original watermark further includes watermark type and owner identification information.

12. The system of claim 10, wherein said player watermark further includes player identification information.